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54 **Breathable microporous film and method for making it.**

57 A method for making soft, flexible, microporous films having high tensile strength and high breathability levels for air and water vapor and high hydrostatic resistance to penetration by liquid water, in which a film fabricated by blending a mixture of a polymer or copolymer of an alpha-olefin with 60 to 75% by weight of an inorganic filler or glass beads having particle sizes within the range of 10 to 15 micrometers and calcium stearate as a processing aid is biaxially stretched from about 1.5 to about 7 times in each direction at a temperature of from about 20° to about 160° C, and the moisture level in the blended composition is maintained below 700 parts per million before fabricating the film; the film so made having a Gurley porosity of from 0.1 to 20 seconds; and its use in disposable items such as panty liners, diapers, bed sheets, and hospital gowns, or, if the filler consists of glass beads, its use as a battery separator.

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EUROPEAN SEARCH REPORT

Application Number

EP 89 11 3910

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|--|--|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. CL.5) |
| X | EP-A-0 227 481 (NIPPON PETROCHEMICALS) * Claims; page 14; page 15, lines 5-6 * --- | 1-3,6-8 ,19 | C 08 J 5/18 C 08 L 23/02 |
| X | EP-A-0 066 672 (MITSUBISHI CHEMICAL) * Claims 1,3; page 4, lines 17-19; page 5, lines 6-7,15-16; page 7, lines 22-25 * --- | 9-10,21 | |
| X | EP-A-0 253 667 (SUMITOMO CHEMICAL) * Claims; page 3, lines 1-6 * --- | 1,3,6-8 | |
| D,A | GB-A-2 151 538 (MITSUI TOATSU) ----- | 10 | |
| | | | TECHNICAL FIELDS SEARCHED (Int. CL.5) |
| | | | C 08 J |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 25-05-1990 | Examiner VAN GOETHEM G.A.J.M. |
| CATEGORY OF CITED DOCUMENTS | | | |
| X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document | | T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document | |

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